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My Early Days in the Biological Survey

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My official connection with the Biological Survey, then the Division of Economic Ornithology and Mammalogy, under Dr. C. Hart Merriam, began on May 10, 1887, but for several years prior to that time, at my home near Elk River, Minn., I had been collecting specimens of mammals for Dr. Merriam and keeping bird-migration records for W. W. Cooke and Otto Widmann. These notes were later used in the bulletin on Bird Migration in the Mississippi Valley, published in the Division in 1888 as Bulletin No. 2, and still later used as a basis for notes on the distribution of birds in check lists and other standard books on ornithology.

Like many young naturalists, I had begun at home by mounting birds and collecting sets of eggs, but soon found that the mammals were less known and more difficult to obtain and study. Learning then that Dr. Merriam, of Locust Grove, N. Y., was making a collection and could identify specimens for me, I wrote and offered to send him specimens if he would tell me the names of them. After he had accepted my proposition, I devoted much of my spare time to helping him, and this led to a lifelong friendship and to the thorough training that he later gave me in field work for the Biological Survey. The mere fact that I was doing 10 to 12 hours of hard work on the farm each day did not interfere seriously with my collecting and making up hundreds of specimens, and the criticism and training given me by Dr. Merriam were keenly appreciated and eagerly followed.

At that time no naturalist had ever come my way. I had few books, and my sources of information and interest were the birds and mammals, reptiles, fish, and plants around me. My father and older brother, like most of the pioneers of that borderland, were hunters and trappers as well as farmers and knew in a general way much about the game and fur-bearing mammals, the birds, fishes, and trees, but I was ambitious to know them all, even the small birds and tiniest shrews. I had my first single-barreled shotgun when 8 years old and at 10 was shooting ruffed grouse and passenger pigeons and trapping muskrats. At 15 I was using a double-barreled shotgun and shooting ducks and prairie chickens on the wing. At 18 I killed my first deer and at 20 my first bear. By that time I had learned to mount specimens of birds and mammals and had made a small collection of my own. By making small tin box traps I was able to catch even mice and shrews and to obtain representatives of practically all of the small, obscure mammals around me.

When Dr. Merriam came to Washington in 1886 he asked if I would go on a collecting trip farther west to study the birds and mammals, and soon after the snow was gone the next spring I received my first official appointment, signed by Commissioner Norman J. Colman and dated May 10, 1887, with instructions to proceed at once to Round Lake, Minn., where the yellow-headed blackbirds were pulling up most of the sprouting corn. From there I was to go to various localities in Iowa, Dakota, western Minnesota, Manitoba, Montana, Wyoming, and Nebraska to work out problems in economic ornithology and mammalogy and gather such specimens as were necessary in identifying all of the birds and mammals found. A full list of the species collected and noted and the localities visited on this trip may be found in the annual report of the Division for that year, and most of the specimens are now in the U. S. National Museum. The Department of Agriculture paid me the munificent salary of \$40 a month and necessary traveling expenses while on the trip, and my notebook shows the expenses running from \$40 to \$60 a month.

Not until August 1888 did I meet Dr. Merriam, at Ogden, Utah, where I was collecting specimens. He was returning from a trip to the west coast, and we had only part of a day together there. A year later, however, I had the great joy of working with him in the survey of the San Francisco Mountain region of Arizona, where the problems of distribution from the bottom of the Grand Canyon to the snow-patched mountain peaks gave me my first clear picture of life zones as affected by altitude.

Later we had many trips together, in Idaho in 1890, Death Valley in 1891, Oregon in 1896, Mount Rainier and the Olympics in 1897, Mount Shasta in 1898, the Trinity Mountains in 1899, the high Sierra with John Muir in 1900, the Cuyamaca Mountains in 1907, the San Gabriels in 1909, and elsewhere at various times since.

In our years of field work together we had much to exchange on observations and knowledge in general gained from far and near, and in the museum collections we worked both together and separately on groups of mammals in the effort to assemble more complete information on the characteristics of the native fauna of North America.

Our collections and our reports on relationships, habits, and distribution of mammals, and zonal distribution of animals and plants, are matters of record, but my greatest contribution to the natural history of North America will always be the training given me by Dr. Merriam, which has been passed on to many young members of the Biological Survey and other field naturalists of the country.